

SMA NEWS



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The SARS Issue

A Decade Later, We Remember



On 31 May 2003, the *Straits Times*' front page triumphantly proclaimed, "Singapore is off WHO's SARS list"! But for the few months prior, the nation, along with 37 other countries, was plunged into a global pandemic of unprecedented proportion, costing 774 lives and almost US\$40 billion (S\$64.6 million) in economic losses worldwide. Hong Kong would identify this virus as a novel coronavirus, SARS, and its genome was fully sequenced remarkably quickly. Prof Wang Linfa, now

wreaked havoc around the world via 21st century global travel. Italian infectious disease physician Carlo Urbani, then treating SARS patients in Hanoi, Vietnam, was the first to alert the World Health Organization (WHO) of this new contagious disease. He died of SARS, but not before convincing the Vietnamese Ministry of Health to isolate patients and rigorously screen travellers. Vietnam became the first country to be declared SARS-free, on 28 April 2003.

A Better Tomorrow

By Dr Toh Han Chong, Editor

of Duke-NUS Graduate Medical School and interviewed in this issue of *SMA News* which commemorates the tenth anniversary of the SARS outbreak, would later confirm the natural harbour of the SARS virus as the horseshoe bat, which then transmitted the virus to the masked palm civet cat, which in turn passed it to humans (page 16). (*Contagion*, the 2011 Steven Soderbergh film starring Matt Damon, Gwyneth Paltrow, Jude Law and Kate Winslet, was inspired by the work of Prof Wang, Prof Ian Lipkin and colleagues.) Chinese doctor Liu Jianlun of room 911 at the Hotel Metropole in Mongkok, Hong Kong, was the source from which the global SARS pandemic arose and

The index case in Singapore was a 22-year-old woman who had returned from Hong Kong, where she had stayed at Hotel Metropole. Dr Leong Hoe Nam, then a registrar training in Infectious Diseases, saw her at Tan Tock Seng Hospital (TTSH) on 3 March 2003, at a time when SARS was not even in the medical literature, and rumours of an emergent infectious virus in Guangdong, China, (suspected to be avian flu or chlamydia) was circulating. Dr Leong developed a transient fever with chills and myalgia but no respiratory symptoms. His fever broke after some days, so he decided to travel to New York City (NYC) for a conference. On his Singapore Airlines (SIA) flight out

Photos: Alexandra Health, KK Women's and Children's Hospital, National University Hospital and iStockphoto



KK Women's and Children's Hospital's team of paediatricians, obstetricians, neonatologists and nurses worked tirelessly on 12-hour shifts



A doctor monitoring a patient closely in Alexandra Hospital in 2003



The main entrances at the National University Hospital's (NUH) two buildings were transformed into triage stations



A traveller wearing a N95 mask at Changi Airport



Over the next few months following the SARS outbreak in Singapore, temperature checkpoints became a somewhat permanent feature in NUH

of NYC via Frankfurt back home, accompanied by his pregnant wife and mother-in-law, he finally developed respiratory symptoms. Singapore's Ministry of Health (MOH) was alerted, and the SIA pilot was in urgent communication with MOH, receiving instructions from Singapore's infectious disease specialists. Dr Leong and his family were isolated in Frankfurt's Klinikum der Johann-Wolfgang Goethe-Universitat, which provided outstanding care by a highly prepared German medical team. Dr Leong's health spiralled down towards near-death, while his wife also developed fever. The reporting of Dr Leong's case by MOH to WHO would catalyse the most massive and well-coordinated global pandemic control response in history.

I received an SMS on 22 April 2003. Crackling with anguish, it simply said, "Alex has died". Vascular surgeon Dr Alexandre Chao was infected by the SARS virus by a 60-year-old patient with ischaemic heart disease, diabetes and kidney impairment, who had been discharged from TTSH and later readmitted to Singapore General Hospital (SGH) on 24 March 2003. The gravity of his passing hit many of us hard, as Alex had been a friend, a fellow medical officer colleague at TTSH A&E, and also a co-worker at SGH. Alex's daughters pay poignant tribute to their father in this issue (page 26).

SARS spread across healthcare institutions much more widely than in the larger community, putting healthcare professionals at the highest risk. Many nurses in uniform were shunned as they travelled to and from work on public transport. Doctors and other healthcare workers were pariah-ed from many social events, as echoed by gregarious golf doyen Dr Jiten Sen, who ran a TTSH walk-in clinic at the start of the SARS epidemic (page 22).

In March 2003, the Iraq War began in the Middle East. A Singaporean teacher stationed in Kuwait was quoted in the media as saying, "It's between getting bombed here and going home and getting pneumonia!" She chose to stay in Kuwait. Singapore was fighting its own nightmarish "War of the Worlds" against an invisible and deadly microbial alien terrorist. All hospitals in Singapore were eventually locked down. Questions were asked as to why this decision was not made earlier, like in Vietnam. Hindsight is always simpler than during the sound and fury of battle. At the National Cancer Centre Singapore (NCCS), we were divided into the outpatient team at NCCS and the inpatient team at SGH. It was moving to see friends and colleagues not backing down from volunteering for hot-zone front-line clinical duties across hospitals in Singapore. In our Department of Medical Oncology, no one stepped down from volunteering for the SGH hot zone. Working in stuffy personal protective equipment and air-trapping suffocating N95 masks the whole day, breathing in largely carbon dioxide, made us woozy from the chronic hypoxic state. Pulse oximetry readings of medical staff in N95 masks often went down to below 85%.

There were many reported stories of courage and many more unreported ones. Dr Lee Kang Hoe, then Chief of Medical Intensive Care at the National University Hospital, vividly describes his own near-fatal battle against SARS and the superb care he received from the brave doctors and nurses in the TTSH intensive care unit, otherwise known as SARS Central, the super hot zone (page 30).

A whole-of-government approach was tested. An enduring image was that of the Cabinet and SARS Task Force drinking Sarsi (which sounds like "kill SARS" in Hokkien) during those days and nights of intense meetings. The Singapore Armed Forces brought contact tracing, home quarantine and IT for pandemic control to a whole new level.

What began as Singapore's "Dark Night of the Soul" became a brief shining moment that tested the resilience and proved the mettle of our people and systems.

Many who took a bullet in the line of duty are featured in this SARS commemoration issue. The then SARS SMA President Dr Lee Pheng Soon asks in this issue whether we are prepared as a country for the Next Big One (page 54). In the dynamic reorganisation of our public healthcare system to bundle primary, secondary and tertiary health clusters into respective seamless integrations, and in a nation of over five million people, smaller than many of Asia's megalopolises like Beijing, Shanghai, Seoul and Tokyo, the strategy to contain the next pandemic must surely not be stymied by polarising silo mentalities of tending to one's own local backyard. As John Maynard Keynes once said, "In the long run, we are all dead."

But still, what I remember best from ten years ago is – *the tireless, fearless resolve, equanimity and human spirit of our healthcare professionals.* **SMA**

Acknowledgements

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